



Department of  
Toxic Substances  
Control

*Preventing  
environmental  
damage from  
hazardous waste,  
and restoring  
contaminated  
sites for all  
Californians.*



State of California



California  
Environmental  
Protection Agency

Public Involvement  
June 2006

## Reaction Products Cleans Up Groundwater Contamination

### Introduction

The Department of Toxic Substances Control (DTSC) is overseeing the cleanup of groundwater contamination at Reaction Products, Inc. (RPI), 840 Morton Street, Richmond, California. Investigations indicate that volatile organic compounds (VOCs) are in the groundwater under the property. The investigation also found that the contamination has not traveled very far and is not under neighboring houses.

The cleanup plan called a draft Removal Action Workplan (RAW), describes in detail the investigation and the proposed cleanup activities at Reaction Products, Inc. DTSC proposes to approve cleanup actions which would reduce the concentrations of the VOCs and minimize the movement of the contaminants in the groundwater.

This fact sheet will provide you with:

- Site location and previous investigations
- Explanation of a RAW
- Cleanup alternatives
- What you may see during the proposed cleanup activity
- California Environmental Quality Act – Negative Declaration

### PUBLIC COMMENT PERIOD

**June 14, 2006 to July 14, 2006**

We encourage you to review and comment on the Draft Removal Action Workplan (RAW) and Negative Declaration for Reaction Products, Inc. DTSC will hold a 30-day public comment period beginning June 14, 2006 and ending on July 14, 2006. All email comments must be sent to DTSC no later than 5:00 p.m. on July 14 2006. Mail written comments to:

Bill Brown, DTSC Project Manager  
700 Heinz Avenue, Berkeley, California, 94710  
Call (510) 540-3841 or e-mail, [bbrown@dtsc.ca.gov](mailto:bbrown@dtsc.ca.gov)

A public meeting will be considered if one is requested. Please submit a written request for a public meeting, including the issues to be raised to Ms. Nancy Cook, Public Participation Specialist, DTSC, 700 Heinz Avenue, Berkeley, CA, 94710, by July 14, 2006 or email her at [ncook@dtsc.ca.gov](mailto:ncook@dtsc.ca.gov). Additional information on this project and DTSC can be found at our website, [www.dtsc.ca.gov](http://www.dtsc.ca.gov).



## Site Location

Reaction Products is located in the northern portion of Richmond in Contra Costa County in an area that is mixed with residential and industrial uses. It is bordered by the Union Pacific Railroad to the west, Morton Avenue to the north, and Chemtura Corporation (formerly Crompton Corp.) on the east and south sides of the property.

Other industrial properties are in close proximity to the site. A residential community, Parchester Village, is located adjacent to Morton Avenue. (See site location map on page 3)

## What Have Previous Site Investigations Found?

Investigations conducted prior to 1998 have included soil and groundwater assessments, including numerous soil borings and groundwater monitoring. Trichloroethene (TCE) was found at concentrations of 2,900 parts per million (ppm) in the soil and 53 ppm in the groundwater. 1,1-Dichloroethene (1,1-DCE) was found at a concentration of 10 ppm in the groundwater.

Soil source removal actions were performed in 1998. The objective of the soil removal was to eliminate a potential source of groundwater contamination in one area. Approximately 250 cubic yards of contaminated soil were excavated and treated onsite. Confirmation samples of the final excavation confirmed that the cleanup goals had been achieved.

TCE impacted groundwater is located in the northwestern portion of the site and may be associated with solvent loading operations. Data from monitoring wells indicates that the groundwater contamination extends to approximately 200 feet west of the site. The contamination is not flowing in the direction of Parchester Village or other residential areas.

## Explanation of a RAW

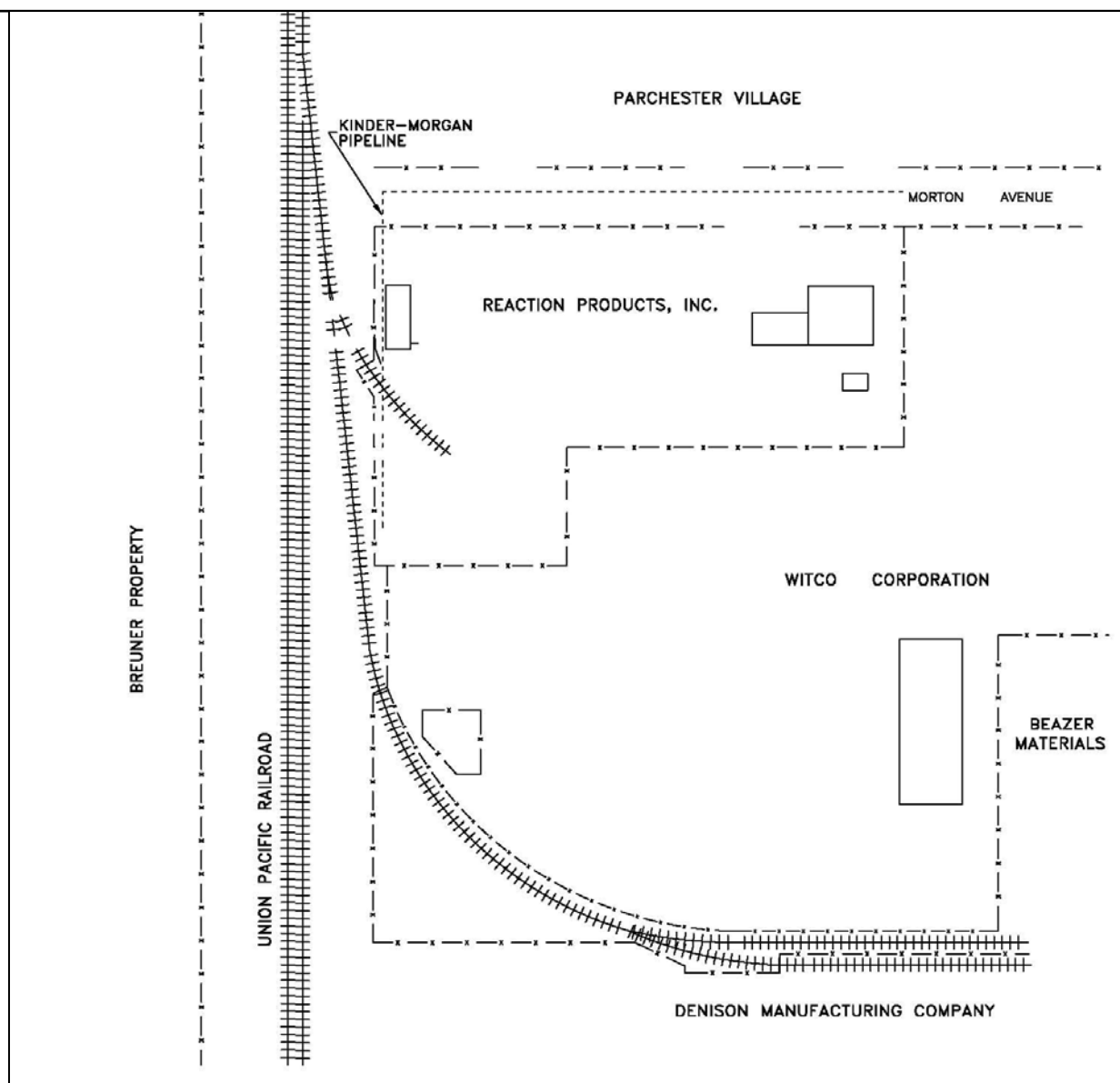
The primary objective of a Draft RAW is to identify a clean up action to prevent or reduce potential risks to public health and the environment. A Draft RAW summarizes previous studies, outlines available cleanup activities and proposes removal options. In addition to cleanup methods, a Draft RAW identifies the possible removal alternatives. Removal alternatives are screened and evaluated on the basis of their effectiveness, ability to implement and cost. Cleanup goals are also developed to comply with applicable laws and to be consistent with proposed land use.

Before DTSC makes a final decision to approve or deny the Draft RAW, we will review, consider, and respond to the comments received during the 30-day public comment period

## What are the Cleanup Alternatives?

Three cleanup alternatives were evaluated for the Reaction Products, Inc. property:

- **No action** – this includes no institutional controls, no treatment of groundwater and no monitoring. This establishes a baseline which other alternatives are compared to.
- **Injection of a hydrogen releasing compound (HRC) and Bio-Inoculum into the groundwater.** – this alternative would consist of injecting hydrogen releasing compounds (HRC) and Bio-Inoculum (bacteria) into impacted areas. HRC slowly releases lactate when hydrated and creates a process known as reductive dechlorination. This mechanism will reduce contaminants in groundwater. Bio-Inoculum is a solution containing bacteria that perform the dechlorination process.
- **A groundwater pump and treat system** – this alternative would consist of installing 3 pumping wells and 2 monitoring wells. Contaminants would then be removed from the groundwater. Monitoring would be required to assess the performance of the system.



**Reaction Products Incorporated Site Map - North** ↑

## Proposed Remediation Alternative

DTSC proposes the second alternative as the best choice. It reduces onsite VOC concerns and is easily implemented without requiring any removal or disposal activities of impacted groundwater. The hydrogen releasing compound helps the natural biological system to break down the chemical into non-toxic components.

In addition to the proposed method of cleanup, groundwater monitoring will continue until the contamination reaches the cleanup standards for drinking water.

## What You May See During the Cleanup Activity

If the second alternative (injection of hydrogen releasing compounds and Bio-Inoculum) is selected, the following are the proposed activities which would occur on the RPI site:

- A drilling rig would be used to install three groundwater monitoring wells to monitor the performance of the cleanup (in addition to four existing monitoring wells).
- A direct-push rig would be used to inject hydrogen releasing compounds and Bio-Inoculum into the ground in approximately 41 locations near the northwest corner of the RPI site.

## California Environmental Quality Act (CEQA)

DTSC has evaluated the cleanup project, in accordance with the CEQA requirements, to determine if the proposed cleanup will have any negative impacts on the environment. DTSC has determined that the cleanup will improve environmental quality, and does not have negative impacts on the environment. Therefore, a Negative Declaration has been prepared in accordance with the California Environmental Quality Act. This document will be filed with the Governor's Office of Planning and Research, State Clearinghouse. DTSC believes that the proposed removal action will not impact any community sensitive populations where people will be in or near areas such as schools, daycare centers, hospitals, clinics, senior centers, youth centers and places of worship.

## Anuncio

Si prefiere hablar con alguien en español acerca de ésta información, favor de llamar a Jacinto Soto, Departamento de Control de Substancias Tóxicas. El número de teléfono es (510) 540-3842

## Notice to hearing impaired individuals

TDD users can obtain information about the site by using the California State Relay Service at (888) 877-5378. Please ask to speak with Nancy Cook, DTSC Public Participation Specialist at (510) 540-3923.

## Information on the Reaction Products Site can also be found at the following link:

[http://www.envirostor.dtsc.ca.gov/public/profile\\_report.asp?global\\_id=07280013](http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=07280013)

## For More Information

If you would like more information about this Site or have questions about the Draft RAW, please contact:

Bill Brown  
DTSC Project Manager  
(510) 540-3841  
or email at [bbrown@dtsc.ca.gov](mailto:bbrown@dtsc.ca.gov)

For information about public participation and community involvement, please contact:

Nancy Cook  
DTSC Public Participation  
(510) 540-3923  
or email at [ncook@dtsc.ca.gov](mailto:ncook@dtsc.ca.gov)

For media questions, please contact:

Angela Blanchette  
DTSC Public Information Officer  
(510) 540-3732  
or email at [ablanche@dtsc.ca.gov](mailto:ablanche@dtsc.ca.gov)

## Information Repositories

We encourage you to review and comment on the Draft Removal Action Workplan and Negative Declaration for Reaction Products, Inc.

The Draft RAW and related documents can be reviewed at the following locations:

Richmond Public Library  
325 Civic Center Plaza  
Richmond, California, 94804  
(510) 620-6559  
Hours: Mon & Tues: 3:00 p.m. to 5:00 p.m.  
Wed & Thurs: 2:00 p.m. to 6:00 p.m.  
Fri & Sat: 1:00 p.m. to 5:00 p.m.  
(Closed Sundays)

Department of Toxic Substances Control  
700 Heinz Avenue  
Berkeley, California 94710  
File Room:  
Monday-Friday: 8:00 a.m. to 5:00 p.m.  
By appointment only (510) 540-3800